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one million patients would protect 50 000 people from death or disability. Large scale randomised controlled trials have the potential to make an important contribution to the prevention of death and disability from this growing epidemic.^{16 17}

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Suicidal ideation among outpatients at general neurology clinics: prospective study

Alan J Carson, Steven Best, Charles Warlow, Michael Sharpe

Suicide is one of the ten most common causes of death for both men and women in Great Britain.¹ Psychiatric disorders are the main risk factor, but numerous studies have also identified physical illness as an important contributory factor.^{1 2} Although it is considered mandatory to enquire about suicidal ideation in psychiatric consultations, this is seldom part of a medical assessment. We aimed to examine suicidal ideation in a consecutive series of patients who had been newly referred to general neurology outpatient clinics. The study was approved by the local research ethics committee.

Participants, methods, and results

As part of another study,³ 300 of 312 consecutive new patients at the general neurology outpatient clinics at the Western General Hospital, Edinburgh, were interviewed using the primary care evaluation of mental disorders (PRIME-MD) structured psychiatric interview schedule.⁴ As part of the interview all patients were asked: "In the last two weeks, have you had thoughts that you would be better off dead or of hurting yourself in some way?"

Patients who answered yes were asked to describe the nature of these thoughts. To be classed as experiencing suicidal ideation the patient had to have thought about active plans for committing suicide—such as buying tablets—nearly every day for the

previous two weeks. Whenever a patient reported such ideation the general practitioner was informed.

Diagnoses of anxiety and depressive disorders that were made using the structured interview were also recorded. After the clinical consultation, the neurologists recorded the neurological diagnosis and whether the patient required psychiatric or psychological assessment or treatment.

Before a patient attended the clinic the patient's general practitioner was sent a brief questionnaire. The general practitioners were asked to indicate whether they believed that the patient required psychiatric or psychological assessment or treatment.

At the time of assessment the researchers were blind to the opinions of the neurologists and the general practitioners.

The clinical characteristics of the patients attending the clinics are shown in the table. One in 11 patients (26/300) seen at the general neurology clinics had given serious thought to committing suicide in the past two weeks. Almost all of these patients (23/26) had major depression. It might be assumed that suicidal ideation would be more likely to occur in patients with progressive, debilitating neurological conditions. However, this was not the case. Twelve of the 26 patients who had experienced suicidal ideation had medically unexplained symptoms, and most of the remainder had non-progressive conditions.

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Clinical characteristics of new patients attending neurology outpatient clinics. Values are numbers (percentages) unless indicated otherwise

	Patients with suicidal ideation* (n=26)	Patients without suicidal ideation (n=274)	Relative risk (95% CI)
Men	12 (46)	114 (42)	1.11 (0.71 to 1.72)
Women	14 (54)	160 (58)	0.84 (0.40 to 1.76)
Age ≤40 years	15 (58)	128 (47)	1.50 (0.71 to 3.15)
Has medically unexplained symptoms	12 (46)	78 (28)	1.62 (1.03 to 2.56)
Has non-progressive neurological disease†	12 (46)	153 (56)	0.83 (0.54 to 1.27)
Has potentially progressive neurological disease‡	2 (8)	43 (16)	0.49 (0.13 to 1.91)
Major depressive disorder diagnosed	23 (88)	54 (20)	4.49 (3.40 to 5.92)
Identified as needing psychiatric assessment:§			
By general practitioner	8 (31)	43 (16)	NA
By neurologist	12 (46)	40 (15)	NA
Not identified	11 (42)	170 (62)	NA

NA=not applicable.

*Prevalence is 9% (95% CI 6% to 12%).

†Includes conditions such as epilepsy, headache, migraine, and neuropathy.

‡Includes conditions such as multiple sclerosis, Parkinson's disease, and brain tumours.

§Not specifically identified as being suicidal.

Comment

Our findings do not support the view that suicidal ideation occurring in neurology patients is largely a rational response to progressive physical illness. Instead, the findings underscore the importance of major depressive disorder in influencing the ways that medically ill patients think about their illnesses and themselves.

The prevalence of 9% (95% confidence interval 6% to 12%) for significant suicidal ideation described in this study is higher than the 2-3% described as occurring in primary care and community settings in the United States.⁵ We are unaware of any data that indicate what proportion of those who are medically ill

and who report suicidal ideation actually go on to kill themselves. None the less, suicidal ideation of the type considered important in this study is clinically significant: it would be taken seriously during a psychiatric consultation.

It is encouraging that 58% of those patients with suicidal ideation were identified by either the general practitioner or the neurologist as needing psychiatric or psychological assessment or treatment. However, general practitioners and neurologists did not always identify the same patients. This highlights the importance of assessing the mental state of medically ill patients and the importance of communication of the findings between general practitioners and specialists.

Contributors: AC developed the primary hypothesis, discussed core ideas and study design, contributed to data collection and analysis, and participated in writing of the paper. SB assisted with data collection and analysis and contributed to writing the paper. CW and MS discussed core ideas and the design of the study and contributed to writing the paper. MS is guarantor for the paper.

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Home collection of urine for culture from infants by three methods: survey of parents' preferences and bacterial contamination rates

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Urinary tract infection is common in childhood. Infants are most likely to scar and often have non-specific symptoms. Because of practical difficulties with collecting urine, samples are often not obtained.¹ Most samples are collected by parents,² yet nobody has sought parents' views on available methods. We assessed contamination rates and parents' opinions of three common methods used at home.

Subject, methods, and results

Parents of children aged 1 to 18 months volunteered to collect urine at home by pads, bags, and clean catch in a randomised order, on one day. The study had ethics committee approval. Demonstrations and instruction sheets were given. Parents washed their hands before each procedure and the child's perineum before each collection. Pads (Newcastle sterile urine collection packs, Ontex UK, Corby) were placed inside the nappy and checked every 10 minutes until wet (but not soiled), then

urine aspirated with a syringe. Bags (Hollister U-Bag, Hollister, Libertyville, IL) were applied and inspected every 10 minutes and removed to decant the urine. For clean catch samples, infants were nursed with a sterile bottle ready. Samples were immediately instilled on to dipslides (Till-U-Test, Dimanco, Bedfordshire) with sterile swabsticks and returned with forms recording parents' collection times, comments, and rankings. Equipment costs were: pads 40 pence for 10 (or 59p for a pack containing syringe, bottle, and two pads); bag 89p; sterile bottle 7p; dipslide and swabstick 59p.

Forty four parents attempted collections (29 boys, median age 4 months, range 1 to 18 months). No samples were obtained from one baby with diarrhoea, and no other child had a urine infection. Bacterial counts were <10⁴/ml (typically reported as "insignificant" or "no growth") from 31 (70%) pads, 29 (66%) bags, and 33 (75%) clean catch collections. Seven samples from pads, eight from bags, and one from clean catch collection had contamination (>10⁴/ml of one or more